IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Sung Hsia Kuo et al.	§	Group Art Unit: unknown
Prior Application Serial No.: 09/136,865	§	
Prior Application Filed: August 19, 1998	§	Examiner: unknown
Serial No.: unassigned	§	
Filed: herewith	§	
For: HOOD INTRUSION AND LOSS OF AC POWER DETECTION WITH AUTOMATIC TIME STAMP	§	Atty. Docket: COMP:0035--1/FLE P98-2162.01

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August 6, 2001 — *Date*
Jennifer Presswood

Assistant Commissioner
For Patents
Washington, D.C. 20231

Dear Sir:

RESPONSE AND PRELIMINARY AMENDMENT

Prior to examining the above-referenced continuation application, please amend the application as set forth below. In response to the Official Action mailed on September 13, 2000, in the above-referenced prior application, Applicants chose to accept the Examiner's allowance of numerous claims and continue prosecution of the rejected subject matter under 37 C.F.R. § 1.53(b). Therefore, Applicants respectfully request consideration of the present claims as amended in this Preliminary Amendment in view of the remarks set forth below.

IN THE SPECIFICATION

Please add the following sentence directly below the title in the specification:

--This application is a continuation of application Serial No. 09/136,865 filed on August 19, 1998.--

IN THE CLAIMS

Please cancel claims 5, 6, 11, 14, 19, 23, 24, 26, 28, 29, 31-44, 46, and 49 without prejudice.

Please amend claims 1, 15, and 45 as set forth below.

1. (once amended) A method of detecting removal of a component of an electrical system, comprising the steps of:

triggering a detection circuit upon removal of a component;

disconnecting a counter within the detection circuit to retain data related to when said component was removed; and

storing the retained data in non-volatile memory.

15. (once amended) A method for detecting loss of power to a portion of a system, comprising the steps of:

triggering a detection circuit upon loss of power;

disconnecting a counter within the detection circuit to retain data related to when said loss of power occurred; and

storing the retained data in non-volatile memory.

45. (once amended) A computer system, comprising:

a chassis with a removable cover, said removable cover providing internal access to said chassis, said chassis housing internal components of said computer, said internal components comprising:

one or more microprocessors which are operatively connected to detect inputs from an input device;

memory which is connected to be read/write accessible by said microprocessor;

one or more devices for mass storage of data, and an output device operatively connected to receive outputs from said microprocessor;

one or more power supplies connected to provide power to said internal components; and

a detection circuit comprising an internal clock and which stores data related to when said components or said removable cover is removed.

REMARKS

At the time the Official Action for the above-referenced prior application was mailed on September 13, 2000, claims 1-50 were pending. In the Official Action, the Examiner allowed claims 31-44, rejected claims 1-4, 7-10, 12, 13, 15-18, 20-22, 25, 27, 30, 45, 47, 48, and 50, and objected to claims 5, 6, 11, 14, 19, 23, 24, 26, 28, 29, 46, and 49. In a Response and Amendment dated December 13, 2000, Applicants amended the objectionable claims to place them in independent form including all of the limitations of the base claim to obtain allowance. Some of the above-referenced objectionable claims and allowed claims were also amended to correct certain clerical and antecedent basis objections cited by the Examiner. Subsequently, the Examiner issued a Notice of Allowance on April 24, 2001 for each of the claims that were previously objected to or allowed. To obviate the rejections to the remaining claims, Applicants have amended claims 1, 15, and 45 to more clearly set forth the claimed subject matter and responded to each of the relevant rejections. Accordingly, reconsideration of the application as amended is respectfully requested.

Rejections Under 35 U.S.C. § 102

The Examiner rejected claims 21, 22, and 30 under 35 U.S.C. § 102 as being anticipated by Fackenthall et al. (6,014, 747). Specifically, with reference to claim 1, the Examiner stated:

> As in claim 21, Fackenthall discloses a method for detecting removal of a component of a system comprising the steps of when a component is removed, 1) generating a signal, 2) using

the signal to stop a clock (i.e., the tamper detect signal causes the system to interrupt) and 3) recording the value of the clock (i.e., once a tamper detect signal has been detected, the exact time in which the signal occurred can be recorded, in which it is well known that the time was recorded from the system clock) (figure 5, col. 3:lines 32-61).

Applicants respectfully traverse this rejection. Anticipation under section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under section 102, a single reference must teach each and every element or step of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Thus, if the claims recite even one element not found in the cited reference, the reference does not anticipate the claimed invention.

Claim 21 recites a method for detecting removal of a component of a system, comprising the steps of: "when a component is removed generating a signal; using said signal to stop a clock; and recording the value of said clock." As should be understood when viewed in light of the present specification, the clock recited in the present claim may refer to a clock within the detection circuitry 100. For example, the clock is illustrated in Fig. 1 as RTC counter 108.

The Examiner has characterized the clock in the present claim as a system clock and asserts that the claim is anticipated by Fackenthall et al. since Fackenthall et al. disclose a tamper detect signal which causes a system to interrupt. Applicants respectfully traverse the assertion that the system interrupt stops a system clock. Sending an interrupt, here a system management interrupt (SMI), to a computer system simply initiates a response from the system processor. The specific response elicited here is a warning message to a user. Column 3, lines 23-32. The processor cannot perform such operations and issue such warnings if the system clock is not

running. As can be appreciated by those skilled in the art, initiating a system interrupt does not disable a system clock as suggested by the Examiner. Therefore, it should be clear that the Fackenthall et al. reference does not disclose a step of using a signal to stop a clock.

In view of the remarks set forth above, Applicants respectfully submit that the subject matter of claim 21 is not anticipated by Fackenthall et al. since the present claim recites elements not found in the cited reference. Accordingly, Applicants request withdrawal of the Examiner's rejection and allowance of claim 21, as well as claims 22 and 30 which are dependent thereon.

Rejections Under 35 U.S.C. § 103

The Examiner rejected claims 1-4, 7-10, 12-13, 45, 47-48, and 50 under 35 U.S.C. § 103(a) as being unpatentable over Cromer et al. (5,945,915) in view of Fackenthall et al. Specifically with respect to claim 1, the Examiner stated:

> As in Claim 1, Cromer discloses a method for detecting the removal of a component of an electrical system that comprises the steps of triggering a detection circuit upon removal of a component and storing non-volatile data related to the removal of the component (Figure 1, abstract, column 2: lines 48-50, column 9: lines 39-46, column 10: lines 17-68). However, Cromer does not specifically disclose that the data related to the removal of the component describes "when" the component was removed. Fackenthall discloses a method for triggering a detection circuit upon removal of a component and storing data related to "when" the component was removed (Figure 5, abstract, column 2: lines 61-65, column: lines 51-61).

Applicants respectfully traverse this rejection. The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a

prima facie case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). The Examiner has failed to show that the combination includes all of the claimed elements.

Claim 1, as amended, recites a method of detecting a removal of a component of an electrical system which includes a step of "disconnecting a counter within the detection circuit to retain data related to when said component was removed." As was recognized by the Examiner in his allowance of the claims in the parent application, none of the cited references disclose a detection circuit which includes a counter to retain data related to the time in which a component was removed. Accordingly, none of the cited references disclose a method of detecting the removal of a component in an electrical system including the step of "disconnecting a counter within the detection circuit to retain data related to when said component was removed." Therefore, because none of the references, either alone or in combination, disclose all of the claimed elements, the cited references are insufficient to establish a *prima facie* case of obviousness.

In view of the remarks and amendments set forth above, Applicants respectfully submit that the subject matter of claim 1 is not rendered obvious by the cited combination. Accordingly, Applicants respectfully request withdrawal of the Examiner's rejection and allowance of claim 1, as well as claims 2-4, 7-10, and 12-13 which are dependent thereon.

In rejecting claim 45, the Examiner stated:

> As in claim 45, Cromer discloses a computer system comprising a chassis with a removable cover, wherein the removal cover provides internal access to the chassis, and the chassis houses internal components of the computer, wherein the internal

> components comprise a microprocessor which is operatively connected to detect inputs from an input device, a memory which is connected to be read/write accessible by the microprocessor, one or more devices for mass storage of data, an output device operatively connected to receive outputs from the microprocessor, a power supply connected to provide power to the internal components and a detection circuit which stores data related to the removal of the removable cover (Figures 1 and 3, abstract, column 2: lines 48-50, column 9: lines 39-46, column 10: lines 17-68). However, Cromer does not specifically disclose that the data related to the removal of the component describes "when" the component was removed. Fackenthall discloses a system for triggering a detection circuit upon removal of a component and storing data related to "when" the component was removed (Figure 5, abstract, column 2: lines 61-65, column 3: lines 51-61).

Claim 45 recites a computer system comprising "a detection circuit comprising an internal clock and which stores data related to when said components or said removable cover is removed." As with claim 1, it should be evident that none of the cited references disclose a detection circuit containing an internal clock to retain data related to when a component or cover is removed. Therefore, because none of the references, either alone or in combination, disclose all of the claimed elements, the cited references are insufficient to establish a *prima facie* case of obviousness.

In view of the remarks and amendments set forth above, Applicants respectfully submit that the subject matter of claim 45 is not rendered obvious by the cited combination since the present claim recites elements not found in the cited references. Accordingly, Applicants request withdrawal of the Examiner's rejection and allowance of claim 45, as well as claims 47, 48, and 50 which are dependent thereon.

The Examiner rejected claims 15-18 and 20 under 35 U.S.C. § 103(a) as being unpatentable over Cummings et al. (5,406,260) in view of Fackenthall et al. Specifically, with reference to claim 15, the Examiner stated:

> As in claim 15, Cummings discloses a method for detecting the removal of a portion of a system by detecting loss of power to the portion of the system which comprises the steps of triggering a detection circuit upon loss of power and reporting this detection via an alarm (Figure 1, abstract, column 6: lines 24-35). However, Cummings does not clearly disclose the step of storing non-volatile data related to when the loss of power occurred. Fackenthall discloses a method for triggering a detection circuit upon removal of a component and storing data related to "when" the component was removed (Figure 5, abstract, column 2: lines 61-65, column 3: lines 51-61). However, Fackenthall does not specifically disclose that this data is non-volatile data.

Claim 15 recites a method for detecting loss of power to a portion of a system including the step of "disconnecting a counter within the detection circuit to retain data related to when a sudden loss of power occurred." As with claim 1, it should be evident that none of the cited references disclose a detection circuit containing a counter to retain data related to when a loss of power occurs. Therefore, it should also be evident that none of the cited references discloses a method for detecting a loss of power in a portion of a computer system including a step of disconnecting a counter within the detection circuit to retain data related to when said loss of power occurred. Therefore, because none of the references, either alone or in combination, disclose all of the claimed elements, the cited references are insufficient to establish a *prima facie* case of obviousness.

In view of the remarks and amendments set forth above, Applicants respectfully submit that the subject matter of claim 15 is not rendered obvious by the cited combination since the present claim recites elements not found in the cited references. Accordingly, Applicants request withdrawal of the Examiner's rejection and allowance of claim 15, as well as claims 16-18 and 20 which are dependent thereon.

The Examiner rejected claim 25 under 35 U.S.C. § 103(a) as being unpatentable over Fackenthall. The Examiner also rejected claim 27 under 37 U.S.C. § 103(a) as being unpatentable over Fackenthall et al. as applied to claim 21 and further in view of Cromer et al.

As previously discussed, with reference to base claim 21 on which claims 25 and 27 depend, Fackenthall et al. does not disclose a method of detecting the removal of a component of a system comprising the steps of: "when a component is removed generating a signal; using said signal to stop the clock; and recording the value of said clock." Cromer et al. does nothing to cure the deficiencies of the Fackenthall et al. reference. Therefore, because none of the references, either alone or in combination, disclose all of the claimed elements, the cited references are insufficient to establish a *prima facie* case of obviousness.

Based on the remarks set forth above, Applicants respectfully submit that claims 25 and 27 are allowable over the cited art. Accordingly, Applicants respectfully request withdrawal of the Examiner's rejection and allowance of claims 25 and 27.

Conclusion

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of claims 1-4, 7-10, 12, 13, 15-18, 20-22, 25, 27, 30, 45, 47, 48, and 50. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

General Authorization for Extensions of Time

In accordance with 37 C.F.R. § 1.136, Applicant hereby provides a general authorization to treat this and any future reply requiring an extension of time as incorporating a request therefor. Furthermore, Applicant authorizes the Commissioner to charge the appropriate fee for any extension of time, any excess fees, or any other fees which may be due to the credit card listed on the attached PTO-2038. However, if the PTO-2038 is missing, if the amount listed thereon is insufficient, or if the amount is unable to be charged to the credit card for any other reason, the Commissioner is authorized to charge Deposit Account No. 06-1315; Order No. COMP:0035--1/FLE (P98-2162-1).

Respectfully submitted,

Date: August 6, 2001

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Please amend claims 1, 15, and 45 as follows:

1. A method of detecting removal of a component of an electrical system, comprising the steps of:

triggering a detection circuit upon removal of a component; [and]

disconnecting a counter within the detection circuit to retain data related to when said component was removed; and

storing the retained data in non-volatile memory [data related to when said component was removed].

15. A method for detecting loss of power to a portion of a system, comprising the steps of:

triggering a detection circuit upon loss of power; [and]

disconnecting a counter within the detection circuit to retain data related to when said loss of power occurred; and

storing the retained data in non-volatile memory [data related to when said loss of power occurred].

45. A computer system, comprising:

a chassis with a removable cover, said removable cover providing internal access to said chassis, said chassis housing internal components of said computer, said internal components comprising:

one or more microprocessors which are operatively connected to detect inputs from an input device;[,]

memory which is connected to be read/write accessible by said microprocessor; [,]

one or more devices form mass storage of data, and an output device operatively connected to receive outputs from said microprocessor;

one or more power supplies connected to provide power to said internal components; and

a detection circuit comprising an internal clock and which stores data related to when said components or said removable cover is removed.